

Simple billing, no surprises

Within the United States

INSURANCE

You won't need to contact your insurance company to find out if testing is covered or to obtain reimbursement; Invitae will work directly with them to coordinate coverage and payment. Typically patients pay no more than \$100 out of pocket for one of our tests. If you receive a bill for more than \$100, please call us to discuss payment options. For testing related to a personal or family history of breast, ovarian, colorectal, or uterine cancer (also referred to as HBOC and Lynch syndrome), Invitae offers an out-of-pocket cost estimator, accessible at www.invitae.com/patient-billing.

PATIENT PAY

You have the option to pay \$250 for your hereditary cancer genetic testing. This option requires upfront payment before test results are released. In addition, your clinician must place the order online and provide your e-mail address so we can send you a link to pay online using a credit card.

MEDICARE & FINANCIAL ASSISTANCE

Invitae accepts Medicare and Medicaid. We may also be able to offer testing at limited or no expense to those who qualify for need-based assistance.

For further information, please contact Client Services at clientservices@invitae.com or 800-436-3037.

Outside the United States

COVERED TESTING

In some countries, genetic testing may be covered by your healthcare system or a third-party insurer. Please discuss with your healthcare provider.

PATIENT PAY

When covered testing is not available through your healthcare system or a third-party insurer, you have the option to pay \$250 USD for your genetic testing. This option requires upfront payment before test results are released. In addition, your clinician must place the order online and provide your e-mail address so we can send you a link to pay online using a credit card.

For further information about testing outside the US, please contact Global Support at globalsupport@invitae.com or for a list of local contact numbers outside of the US, please visit www.invitae.com/contact.



About us

Invitae is a genetics company whose mission is to bring comprehensive genetic information into mainstream medicine to improve healthcare for billions of people. Invitae testing provides answers to essential health questions—understanding disease risk, guiding a healthy pregnancy, or finding a diagnosis—at high quality, fast turnaround, and low prices.

We strive to make testing affordable and accessible.

Understanding hereditary breast cancer



This guide applies only to gene and panel testing; for exome testing please see the Invitae exome patient guide.

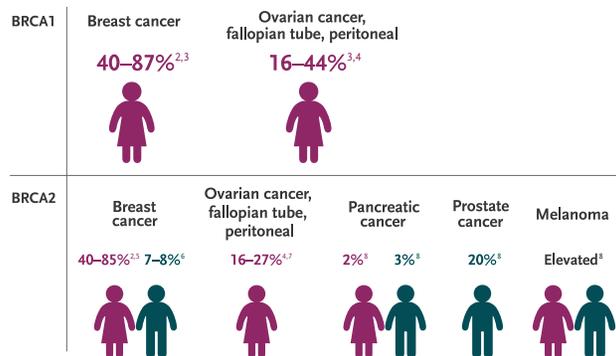
The genetics of breast cancer

Approximately 10 percent of patients with breast cancer have a genetic variant that increases their risk of developing the disease. An additional 20 percent have a close family member who also had breast cancer, suggesting a familial link even though no specific genetic variant was identified.¹

BRCA1 and BRCA2 are the most common genes known to increase the risk of breast and ovarian cancers. Variations in these genes can also increase the risk for other cancers, including fallopian tube cancer, primary peritoneal cancer, pancreatic cancer, melanoma, male breast cancer, and prostate cancer.

Lifetime cancer risks

A genetic variation in BRCA1 or BRCA2 can increase the likelihood that a person will develop cancer in his or her lifetime.



Many other genes can increase an individual's risk of developing breast cancer, including CDH1, PALB2, PTEN, STK11, and TP53. Like BRCA1 and BRCA2, many of these genes also influence risk for other types of cancers.⁹

1. Zimmerman, BT. Understanding breast cancer genetics. Jackson, MS: University Press of Mississippi, 2004.
2. Hopper, JL et al. *Cancer Epidemiol Biomarkers Prev.* 1999; 8:741-747.
3. Ford, D et al. *Lancet.* 1994; 343:692-695.
4. Struwing, JP et al. *N Engl J Med.* 1997; 336(20):1401-8.
5. King, MC et al. *Science.* 2003; 302:643-646.
6. Evans, DG et al. *J Med Genet.* 2010; 47:710-1.
7. Ford, D et al. *Am J Hum Genet.* 1998; 62:676-89.
8. The Breast Cancer Linkage Consortium. *J Natl Cancer Inst.* 1999; 91:1310-1316.
9. [Reference missing]

Who should consider genetic testing?

Genetic testing may be appropriate if you have:

- Any of the following in yourself or a relative*:
 - Breast cancer diagnosed at or before age 50
 - Ovarian cancer
 - Pancreatic cancer
 - Male breast cancer
 - Metastatic, intraductal, or high grade prostate cancer
- Three or more relatives on the same side of the family with any of the following cancers at any age: breast, colorectal, endometrial (uterine), prostate
- Ashkenazi Jewish ancestry on either side of your family
- A relative who tested positive for a genetic variant related to cancer risk

*Relatives to consider include siblings, children, parents, aunts, uncles, and grandparents.

What are the benefits of testing?

If you have an elevated risk of developing cancer based on your genetic test result, you can work with your healthcare provider to create a plan designed to prevent a cancer entirely, or help to identify a cancer at an earlier, more treatable stage.

In addition, genetic testing can help:

- provide an explanation for your personal or family history of cancer
- evaluate your risk of developing future cancers
- make informed medical decisions, including treatment, surveillance, and preventive options
- qualify you for participation in clinical trials or research studies
- identify other at-risk relatives for whom genetic testing is recommended

Learn more at
www.invitae.com/individuals

What are the potential results?

POSITIVE

If testing identifies a variant known to increase your cancer risk, consult with your healthcare provider to create a screening and management plan and to identify relatives who may need to be tested.

NEGATIVE

If testing identifies no variants known to increase cancer risk, your future risk depends on your personal medical history and family history of cancer. This does not rule out other genetic conditions; consult with your healthcare provider to discuss surveillance recommendations.

VARIANT OF UNCERTAIN SIGNIFICANCE

In some cases, testing can identify a variant, but it is not known at this time whether the variant increases the risk for cancer. In this case, your cancer surveillance recommendations should be based on your personal and family medical histories.

Genes tested with Invitae hereditary breast cancer panels

Invitae has extensive testing options for breast cancer, with results in 10–21 calendar days on average.

Invitae also offers STAT panels, with results available in 5–12 days (7 days on average).

GENES TESTED:

- | | | |
|---------------------------------|--------------------------------|----------------------------------|
| <input type="checkbox"/> ATM | <input type="checkbox"/> EPCAM | <input type="checkbox"/> PTEN |
| <input type="checkbox"/> BARD1 | <input type="checkbox"/> MLH1 | <input type="checkbox"/> RAD50 |
| <input type="checkbox"/> BRCA1 | <input type="checkbox"/> MSH2 | <input type="checkbox"/> RAD51C |
| <input type="checkbox"/> BRCA2 | <input type="checkbox"/> MSH6 | <input type="checkbox"/> RAD51D |
| <input type="checkbox"/> BRIP1 | <input type="checkbox"/> NBN | <input type="checkbox"/> SMARCA4 |
| <input type="checkbox"/> CDH1 | <input type="checkbox"/> NF1 | <input type="checkbox"/> STK11 |
| <input type="checkbox"/> CHEK2 | <input type="checkbox"/> PALB2 | <input type="checkbox"/> TP53 |
| <input type="checkbox"/> DICER1 | <input type="checkbox"/> PMS2 | <input type="checkbox"/> _____ |